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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,424	01/20/2004	Chikuni Kawakami	0879-0426P	7763

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EXAMINER	
WANG, KENT F	

ART UNIT	PAPER NUMBER
2622	

NOTIFICATION DATE	DELIVERY MODE
10/30/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/759,424	KAWAKAMI, CHIKUNI	
	Examiner	Art Unit	
	KENT WANG	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 August 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) *3 and 4* is/are withdrawn from consideration.

5)☒ Claim(s) *2,6,8, 10 and 12* is/are allowed.

6)☒ Claim(s) *1,5,7,9 and 11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-12 are pending in the application and claims 3-4 are withdrawn from consideration.

Response to Arguments

2. Applicant's arguments with respect to claims 2, 6, 8, 10 and 12 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. Applicant's arguments with respect to claims 1, 5, 7, 9 and 11 have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 5, 7, 9 and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Shiraishi (JP 11-133476) in view of Kawakami (US 7,106,378).

Regarding claim 1, Shiraishi discloses a digital camera having an electronic flash device as a flash light source, comprising:

- a non-volatile memory (a EEPROM 203, drawing 1) storing correction information (e.g. luminescent color temperature of the strobe light) for correcting white balance of an image obtained by flash shooting using the electronic flash device (a strobe device 111, drawing 1) wherein the correction information is for the light only of said an

electronic flash device (the luminescent color temperature of the strobe light at the time of each voltage between terminals is measured and it stores as a strobe light pipe characteristics table showing the relation between the voltage between terminals of a strobe light pipe, and luminescent color temperature on EEPROM 203) ([0034]); and

- a white balance correcting device (a control section 201, drawing 1) which corrects white balance of the image obtained by flash shooting using the electronic flash device (111) based on the correction information stored in the non-volatile memory (203) (the control section 201 controls imaging operation, white balance (AWB) adjusting operation, a stroboscope drive, etc., as the control section 201 refers to the strobe light pipe characteristics table stored in EEPROM 203, the shift amount of the color temperature of a flash is computed from the time energized in the strobe light pipe, the gain which should be set as the multiplier of R and B of an AWB control value which corrects white balance of the image obtained by flash shooting using the electronic flash device (111) based on the correction information stored in the EEPROM) ([0034]-[0038] , Shiraishi).

Shiraishi does not disclose a digital camera having an electronic flash device using a light-emitting diode as a flash light source. However, Kawakami discloses a digital camera having an electronic flash device using a light-emitting diode as a flash light source (light source part 36 is comprised of a LEDs 38 and they are preferably arranged so that a white light is produced when all the LEDs 38 emit lights) (col. 6, lines 10-18, Kawakami).

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the light-emitting diode as taught by Kawakami into

Shiraishi's camera, as the LED is much cheaper and consumed less electric energy, further to prevent unnatural colors of a picture (col. 1, lines 30-32, Kawakami).

Regarding claim 5, the limitations of claim 1 are taught above, Shiraishi discloses an input device (a camera operation part 202, drawing 1) for inputting the white balance correction information (e.g. luminescent color temperature of the strobe light), wherein the non-volatile memory (203) stores the white balance correction information inputted through the input device (camera operation part 202 is for performing directions of a digital camera of operation) ([0029]-[0030], Shiraishi).

Regarding claim 7, the limitations of claim 1 are taught above, Shiraishi discloses the correction information is set based on a characteristic of the flash device (the luminescent color temperature of the strobe light at the time of each voltage between terminals is measured beforehand, and it stores) ([0034], Shiraishi).

Shiraishi does not disclose a digital camera having an electronic flash device using a light-emitting diode as a flash light source. However, Kawakami discloses a digital camera having an electronic flash device using a light-emitting diode as a flash light source (light source part 36 is comprised of a LEDs 38 and they are preferably arranged so that a white light is produced when all the LEDs 38 emit lights) (col. 6, lines 10-18, Kawakami).

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the light-emitting diode as taught by Kawakami into Shiraishi's camera, as the LED is much cheaper and consumed less electric energy, further to prevent unnatural colors of a picture (col. 1, lines 30-32, Kawakami).

Regarding claim 9, the limitations of claims 1 and 7 are taught above, Shiraishi discloses the characteristic of the flash device is stored in the non-volatile memory as the characteristic of the flash changes with time (the luminescent color temperature of the strobe light at the time of each voltage between terminals is measured beforehand, and it stores as a strobe light pipe characteristics table showing the relation between the voltage between terminals of a strobe light pipe, and luminescent color temperature, and at the time of a strobe light, an AWB control value is computed using this strobe light pipe characteristics table) ([0034], Shiraishi). Shiraishi does not disclose a digital camera having an electronic flash device using a light-emitting diode as a flash light source. However, Kawakami discloses a digital camera having an electronic flash device using a light-emitting diode as a flash light source (light source part 36 is comprised of a LEDs 38 and they are preferably arranged so that a white light is produced when all the LEDs 38 emit lights) (col. 6, lines 10-18, Kawakami).

Regarding claim 11, this claim differs from claim 1 only in that the claim 1 is an apparatus claim whereas claim 11 recites similar features in a method format. Thus the method claim 11 is analyzed and rejected as previously discussed with respected to claim 1 above.

Allowable Subject Matter

5. Claims 2, 6, 8, 10, and 12 are allowed.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

   - Nakayama (US 6,963,362) provides an image pickup apparatus capable of achieving optimum color balance when a picture is taken using a flash apparatus; and
   - Takeshita (US 7,365,778) provides an electronic camera and a white balance correction circuit that use relatively simple processing to properly set white balance correction values at stroboscope imaging.

Inquiries

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent Wang whose telephone number is 571-270-1703. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-270-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://portal.uspto.gov/external/portal/pair. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer

Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TUAN HO/
Primary Examiner, Art Unit 2622
KW
20 October 2009